

# **Environmental Issues Committee MINUTES**

May 2, 2002

2-4 pm

MD Dept. of the Environment

## **Background on Cancer Plan process, plan outline and introduction of evaluation tool.**

Robert Villanueva, Executive Director of the State Council on Cancer Control, briefly explained that DHMH has received a grant from CDC to develop a cancer control plan for Maryland. This plan will approach the goal of reducing deaths from cancer in Maryland in a comprehensive manner involving primary prevention, early detection, and enhanced cancer care. Detailed information about the Cancer Control Work plan can be found on the website: [www.MarylandCancerPlan.org](http://www.MarylandCancerPlan.org). The brief chapter on Environmental Issues included in both the 1991 and 1996 MD Cancer Control Plans was provided to the group. The purpose of our committee is to expand this chapter by developing a strategy by which DHMH can determine the extent to which specific environmental factors play a key role in cancer incidence in Maryland.

## **Define Nature & Scope of environmental issues to be addressed**

Initial questions raised by the group on this topic included:

- How are we going to address 2<sup>nd</sup>-hand smoke, if at all? Will the Tobacco Use Prevention Committee cover this topic?
- Do we include occupational issues within this chapter or is it separate? It was decided that occupational related cancers should be a sub-set within each category.

It was decided that the best approach to looking at environmental related cancers would be to examine exposure pathways to hazards that are known to cause different types of cancers. The hazards could be chemical, physical or biological. The committee drew up an initial list of suspect agents within these three categories:

- Chemical
  - Hormonally active chemicals
  - Pharmaceuticals
  - Pesticides
  - Nitrates
  - Hazardous Air Pollutants
  - Disinfection Byproducts
  - Arsenic
  - Chromium
  - Lead
  - Cadmium
  - Mercury
  - Dioxins
  - Asbestos
  - PCB's
  - Environmental Tobacco Smoke
  - PAHs
  - Phthalates
- Physical

- Radon
- Radium
- Ionizing Radiation
- Non-Ionizing Radiation (Cell phones)
- Biological
  - Hepatitis B & C
  - HPV (cervical & oral)
  - HIV

Discussion also centered on **other factors besides infectious agents** that may play a role in enhancing environmentally induced cancers. These included:

- Nutrition & Diet (MD Inner Harbor fish survey)
- Genetic susceptibility

In order to narrow the field and establish priorities, the suggestion was made that we should identify those environmental factors that are known to be **important in Maryland**, such as:

- Radium
- Arsenic in soil
- Nitrates
- Chlorination byproducts
- Chromium

In addition to these well known areas, we should develop a mechanism by which the state can **identify new, emerging threats to human health** – either from new industries moving into the state or from previously unknown hazards such as groundwater contamination with pharmaceuticals, the formation of acrylamides in cooked foods, or exposure to flame retardants.

The key to prevention of environmental related cancers is to find ways to eliminate or at least reduce exposure doses once important routes of exposure to carcinogenic agents are identified. To do this much more surveillance is needed.

Risk communication will be an important component of this chapter. It is necessary for people to understand the knowledge of the relative impact of exposures to carcinogens from different sources is needed to develop effective control strategies.

The suggestion was made that we review control plans from other states, especially New Jersey.

### **Identify cancers of interest**

Prior to looking at the availability of databases that can be used to identify relationships between exposures to hazardous agents and cancer incidences, it

would be beneficial to narrow the field to those cancers with known environmental associations. Suggestions for this list included:

- Lung
- Liver
- Bladder
- Leukemia
- Kidney
- Myelomas
- Breast
- Non-Hodgkin's lymphoma
- Brain

In order to evaluate these with respect to their environmental origins in MD, we need more user friendly databases. This lead to a discussion of data needs – what's available and what should be developed as part of the cancer control plan. Some initial suggestions included:

### **Existing Data Sources and Information Needs of the Committee**

- Mortality data for key tumors (MCR)
- List of data available and stage of coding (MCR)
- BRFSS – questions related to cancer
- Population demographics (age/ethnicity/income level) & susceptible populations
- Background on occupations in MD – Industry picture
- Percent of population in chemical occupations
- Ambient air data
- Environmental data for MD for sediments, water in rivers and Chesapeake Bay
- MD Discharge Permits
- TRI data for MD industries
- Drinking water monitoring data
- Location of Superfund and other hazardous waste sites in MD
- Ambient air monitoring data
- DC Report on Childhood Cancers

### **Timeline for development of the report**

It would be best to target the end of July for a draft of our committee report. A series of community meetings will be held from July 15 – August 13<sup>th</sup>. Peer reviewers will need the report by August or September. At an October 16<sup>th</sup> conference, each committee will be asked to present a 15-minute summary of their report. To meet this timeline, we will schedule follow-up meetings approximately 2 weeks apart through the first part of July.

The purpose of our next meeting will be to evaluate the adequacy of existing cancer incidence and mortality data available for MD. Ms. Stacey Neloms will review the MCR database. The availability of other suitable databases will be reviewed and information needs discussed.